

AMENDMENT TO THE CLAIMS

The following is a detailed listing of all claims that are, or were, in the Application.

1-50. (Canceled)

51. (Currently amended) A ~~computer-implemented~~ method implemented by an apparatus for processing multimedia content and user preferences related to multimedia content consumption, the method comprising:

storing, in a multiple hierarchical data structure, personal information to identify a user;

storing, in the hierarchical data structure, ~~providing a user description including a~~ user preference description that has a hierarchical structure to describe the user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element at the same level of the hierarchical data structure, the first parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred and including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element,~~ wherein the first parent preference element in the hierarchical data structure includes a first preference condition that specifies a first place to which ~~the multimedia preference descriptions in the first parent and first child preference elements apply, and wherein the~~ second parent preference element includes a second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies;

in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element for a search and recommendation of selected multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information

provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with the first preference condition.

52. (Canceled)

53. (Currently amended) The method of claim 51, ~~wherein providing the user description includes~~ further comprising:

receiving user input defining at least a portion of ~~the multimedia preference description in one of the first parent and first child preference elements.~~

54. (Currently amended) The method of claim 51, ~~wherein the user description includes~~ further comprising:

storing, in the hierarchical data structure, a usage history describing events of consuming multimedia content.

55. (Canceled)

56. (Currently amended) The method of claim 51, wherein the first content description element ~~multimedia preference description in one of the first parent preference element and first child preference elements~~ specifies a multimedia genre.

57. (Currently amended) The method of claim 51, wherein the first content description element ~~multimedia preference description in one of the first parent preference element and first child preference elements~~ specifies an actor or a director.

58. (Previously presented) The method of claim 51, wherein one of the first child preference elements of the first parent preference element includes a further preference condition.

59. (Currently amended) The method of claim 51, further comprising:
updating the user preference description.

60. (Canceled)

61. (Currently amended) The method of claim ~~[[86]]~~ 51, wherein the personal information user description includes a user identifier specifying a name for ~~at least one the~~ user, and wherein the first and second parent preference elements apply for the same at least one user.

62. (Currently amended) A ~~computer-implemented~~ method implemented by an apparatus for processing multimedia content and user preferences related to multimedia content consumption, the method comprising:

receiving a user preference description ~~that has~~ in a multiple hierarchical data structure to describe a user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element at the same level of the hierarchical data structure, the first parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred~~ and including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element, wherein the first parent preference element in the hierarchical data structure includes a first preference condition that specifies a

first place to which ~~the multimedia preference descriptions in the first parent and first child preference elements apply, and wherein the second parent preference element includes a~~ second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies; and

in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element [[to]] for a search and recommendation of selected ~~for or filter~~ multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with ~~specified by~~ the first preference condition.

63-64. (Canceled)

65. (Currently amended) The method of claim 62, wherein the ~~multimedia preference description~~ first content description element ~~in one of the first parent preference element and first child preference elements~~ specifies a multimedia genre.

66. (Currently amended) The method of claim 62, wherein the ~~multimedia preference description~~ first content description element ~~in one of the first parent preference element and first child preference elements~~ specifies an actor or a director.

67. (Previously presented) The method of claim 62, wherein one of the first child preference elements includes a further preference condition.

68. (Previously presented) The method of claim 62, further comprising:
updating the user preference description.

69. (Previously presented) The method of claim 62, further comprising:
storing the user preference description.

70. (Currently amended) The method of claim ~~[[87]]~~ 62, wherein the user preference description is associated with a user identifier that includes a name for ~~at least one~~ the user, and wherein ~~the first and second parent preference elements apply for the same at least one user.~~

71. (Currently amended) A system for processing multimedia content and user preferences related to multimedia content consumption, the system comprising:
a data storage device; and
data processing apparatus configured to perform operations comprising:
providing, in a multiple hierarchical data structure, a user description
~~including~~ a user preference description that has a hierarchical structure to describe a user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element at the same level of the hierarchical data structure, the first parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred and~~ including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element, wherein the first parent preference element in the hierarchical data structure includes a first preference condition specifying a first place to which ~~the multimedia preference descriptions in~~ the first parent and first child preference elements apply, and

wherein the second parent preference element includes a second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies; and

storing the hierarchical data structure with the user preference description in the data storage device;

in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element for a search and recommendation of selected multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with the first preference condition.

72. (Canceled)

73. (Currently amended) The system of claim 71, wherein providing the user preference description includes receiving user input defining at least a portion ~~of the multimedia preference description in one of the first parent and first child preference elements.~~

74. (Currently amended) The system of claim 71, wherein ~~the user description includes~~ the data processing apparatus is further configured to perform operations comprising:

storing, in the data storage device as a portion of the hierarchical data structure, a usage history describing events of consuming multimedia content.

75. (Currently amended) The system of claim 71, wherein the first content description element ~~multimedia preference description in one of the first parent preference element and child preference elements~~ specifies a multimedia genre.

76. (Currently amended) The system of claim 71, wherein the data processing apparatus is further configured to perform operations comprising:
updating the user preference description.

77. (Currently amended) A system for processing multimedia content and user preferences related to multimedia content consumption, the system comprising:
a data storage device to store, in a multiple hierarchical data structure, a user preference description ~~that has a hierarchical structure~~ to describe a user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element at the same level of the hierarchical data structure, the first parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred~~ and including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element, wherein the first parent preference element includes a first preference condition specifying a first place to which ~~the multimedia preference descriptions in the first parent and first child preference elements apply, and wherein the second parent preference element includes a second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies;~~ and
data processing apparatus configured to perform operations comprising:
receiving the user preference description from the data storage device; ~~and~~
in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element [[to]]

for a search and recommendation of selected ~~for or filter~~ multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with specified by the first preference condition.

78. (Canceled)

79. (Currently amended) The system of claim 77, wherein the first content description element ~~multimedia preference description in one of the first parent preference element and first child preference elements~~ specifies a multimedia classification attribute.

80. (Previously presented) The system of claim 77, wherein the data processing apparatus is further configured to perform operations comprising:
updating the user preference description.

81. (Currently amended) A computer program product, tangibly embodied in a computer readable medium, for processing multimedia content and user preferences related to multimedia content consumption, the computer program comprising instructions to cause data processing apparatus to perform operations comprising:

storing, in a multiple hierarchical data structure, personal information to identify a user;

storing, in the hierarchical data structure, providing a user description including a user preference description that has a hierarchical structure to describe the user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element having, the first

parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred~~ and including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element, wherein the first parent preference element in the hierarchical data structure includes a first preference condition specifying a first place to which ~~the multimedia preference descriptions in the first parent and first child preference elements apply~~, and wherein the second parent preference element includes a second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies;

in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element for a search and recommendation of selected multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with the first preference condition.

82. (Canceled)

83. (Currently amended) The computer program product of claim 81, wherein ~~the user description~~ the computer program further includes instructions to cause the data processing apparatus to perform operations comprising:

storing, in the hierarchical data structure, a usage history describing events of consuming multimedia content.

84. (Currently amended) A computer program product, tangibly embodied in a computer readable medium, for processing multimedia content and user preference related to multimedia content consumption, the computer program comprising instructions to cause data processing apparatus to perform operations comprising:

receiving a user preference description ~~that has in a~~ multiple hierarchical data structure to describe a user's preferences for filtering and searching for multimedia content, the hierarchical data structure including a first parent preference element and a second parent preference element, the first parent preference element having one or more first child preference elements, ~~each of the first parent and first child preference elements including at least one multimedia preference description to identify preferred and including a first content description element and a first preference value that characterizes the user's preference for multimedia content corresponding to the first content description element~~, wherein the first parent preference element ~~in the hierarchy~~ includes a first preference condition specifying a first place to which ~~the multimedia preference descriptions in the first parent and first child preference elements apply~~, and wherein the second parent preference element includes a second content description element, a second preference value, and a second preference condition that specifies a second place to which the second parent preference element applies; and

in accordance with the first preference condition, using the first content description element and the first preference value in the first parent preference element [[to]] for a search and recommendation of selected for or filter multimedia content preferred by the user at the first place from multimedia content available in a television broadcast environment from an information provider; and

at the first place, receiving at least a portion of the selected multimedia content based on a result of the search and recommendation in accordance with specified by the first preference condition.

85-91. (Canceled)